

I claim:

1. A support system for a portable grill having a grill bottom, a first rack for holding items, said grill bottom having a first set of coplanar openings in one plane, said system comprising:

a set of legs, each of the legs having a first set of support members for extending through the first set of coplanar openings in the grill bottom and for supporting the first rack by gravity without any additional fasteners, said legs fastenable to each other separate from the grill bottom.

2. A support system as claimed in claim 1, wherein the first rack holds food, and wherein the portable grill has a second rack for holding fuel, and further wherein the grill bottom has a second set of coplanar openings in a second plane closer to the bottom of the grill than the first set of openings;

wherein said set of legs has a second set of support members for extending through the second set of openings for supporting the second rack by gravity without additional fasteners.

3. A support system as claimed in claim 2, wherein the grill bottom has a grill rim defining a main opening into said grill bottom and the first set of coplanar openings are upper openings located about 3/4" below the grill rim and the second set of coplanar openings are located about 3" below the grill rim.

4. A support system as claimed in claim 1, wherein the portable grill further includes a grill cover, said legs having latching members for latching said legs to said grill cover.

5. A support system as claimed in claim 4, wherein said latching members are toggle members.

6. A support system as claimed in claim 5, wherein said grill cover has a rim; and

wherein said toggle members each comprise a base piece fixed to one of said legs, a locking arm axle parallel to the planes of the openings in the grill bottom, a locking arm pivotal about said axle, and a locking wire for engaging the rim of the grill cover for latching said grill

cover to the grill bottom when said locking arm is pivoted to a locking condition.

7. A support system as claimed in claim 1, wherein said legs are made of metal.

8. A support system for a portable grill having a grill bottom, the grill bottom having a rim defining a main opening into the grill bottom, and a series of radial spaced upper openings in the grill bottom beneath the grill bottom rim, a series of radial spaced lower openings in the grill bottom beneath the upper openings, a first rack for holding food, a second rack for holding fuel, and a grill cover, said system comprising:

a plurality of legs, each leg having a top end, a bottom end, a lower tab, an upper tab, an upper portion beginning at the top end and generally matching the contour of the grill bottom, a middle portion being generally straight, and a lower portion having three sections, the first section forming a foot portion, the second section being generally parallel to the one-third of the leg at the middle, the third section being generally perpendicular to the second section, said third section having a leg fastener opening, the third section terminating in the bottom end; and

a fastening apparatus for passing through the leg opening of all of said legs;

wherein the middle portion of each leg extends from the upper portion at an exterior angle between 90 and 150 degrees, the bottom portion extends from the middle portion at an interior angle between 60 and 90 degrees, said fastening apparatus fastens said bottom ends of said legs and said rim engages said top end of each of said legs, said upper openings receive said upper tabs, said lower openings receive said lower tabs, said upper tabs support said first rack and said lower tabs support said second rack.

9. A support system as claimed in claim 8, wherein said fastening apparatus is a screw and wing nut.

10. A support system as claimed in claim 8, wherein said fastening apparatus is a bolt and nut.

11. A support system as claimed in claim 8, wherein the upper openings are about 3/4" below the rim.
12. A support system as claimed in claim 8, wherein the lower openings are between about 2" and 4" below the rim.
13. A support system as claimed in claim 8, wherein the upper openings are about 3/4" below the grill rim and the lower openings are about 3" below the grill rim.
14. A support system as claimed in claim 8, wherein each leg further comprises a toggle lock for locking said leg to the grill cover.
15. A support system as claimed in claim 8, wherein said legs are made of metal.
16. A support system as claimed in claim 8, wherein the grill bottom is semi-hemispherical.
17. A support system for a portable grill having a grill bottom, the grill bottom having a rim defining a main opening into the grill bottom, and a series of radial spaced upper openings in the grill bottom beneath the grill bottom rim, a series of radial spaced lower openings in the grill bottom beneath the upper openings, a first rack for holding food, a second rack for holding fuel, and a grill cover, said system comprising:

a plurality of legs, each leg having a top end, a bottom end, a lower tab, an upper tab, a generally straight upper portion beginning at the top end, a middle portion being generally straight, and a lower portion having three sections, the first section forming a foot portion, the second section being generally parallel to the one-third of the leg at the middle, the third section being generally perpendicular to the second section, said third section having a leg fastener opening, the third section terminating in the bottom end; and

a fastening apparatus for passing through said leg opening of all of said legs;

wherein the grill bottom is a generally truncated cone shape, and

wherein the middle portion of each leg extends from the upper portion at an exterior angle between 90 and 150 degrees, the bottom portion extends from the middle portion at an interior angle between 60 and 90 degrees, said fastening apparatus fastens said bottom ends of said legs and the rim engages said top end of each of said legs, the upper openings receive said upper tabs, the lower openings receive said lower tabs, said upper tabs support the first rack and said lower tabs support the second rack.

18. A portable grill assembly system comprising:

 a grill bottom having a rim;
 first and second racks for holding items;
 a grill cover;
 at least two legs;
 at least one upper opening in said grill bottom for each leg, said upper openings spaced equidistant on the circumference of said grill bottom below said rim;
 at least one lower openings in said grill bottom for each leg, said lower openings spaced equidistant on the circumference of said grill bottom below the upper openings;
 each of said legs having a top end, a bottom end, a lower tab, an upper tab, an upper portion beginning at the top end and generally matching the contour of the grill bottom, a middle portion being generally straight, and a lower portion having three sections, the first section forming a foot portion, the second section being generally parallel to the one-third of the leg at the middle, the third section being generally perpendicular to the second section, said third section having a leg fastener opening, the third section terminating in the bottom end; and
 a fastening apparatus for passing through said leg fastener opening of all of said legs;
 wherein the middle portion of each leg extends from the upper portion at an exterior

angle between 90 and 150 degrees, the bottom portion extends from the middle portion at an interior angle between 60 and 90 degrees, said fastening apparatus fastens said bottom ends of said legs and said rim engages said top end of each of said legs, said upper openings receive said upper tabs, said lower openings receive said lower tabs, said upper tabs support said first rack and said lower tabs support said second rack.